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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,061	03/22/2004	Rajiv Kumar	U 015095-2	1536
7590 William R. Evans Ladas & Parry 26 West 61 Street New York, NY 10023		06/25/2007	EXAMINER SEAMAN, D MARGARET M	
			ART UNIT 1625	PAPER NUMBER
			MAIL DATE 06/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,061

Applicant(s)

KUMAR ET AL.

Examiner

/D. Margaret Seaman/

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application was filed 3/2/2004. Claims 1-11 are before the Examiner and remain subject to a restriction requirement.

Election/Restrictions

1. Applicant's election with traverse of VII in the reply filed on 4/4/2007 is acknowledged. The traversal is on the ground(s) that 1) the invention do not overlap in scope, 2) the inventions are not obvious variants and 3) the inventions have materially different effect. This is not found persuasive because 1) the inventions do not overlap in scope... making pyridine or making piperidine by using different reactants 2) the inventions are not obvious variants because one of ordinary skill in the art would not use a method of making pyridine (fully aromatic compound) to make piperidine (fully hydrogenated pyridine) and 3) the inventions have materially different effect...namely different products from the "same" reactants. If applicant would admit on the record that these processes are obvious variants, then the groups will be rejoined as far as the method of making pyridine or picoline by using one of the reactants of groups 1-6.

The requirement is still deemed proper and is therefore made FINAL.

2. This application contains claims 1-11 (in part) drawn to an invention nonelected with traverse in the reply filed on 4/4/07. A complete reply to the final rejection must

include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 1 has two sentences (see line 5 last two words). Claims 9-10 refer to catalyst A, B, C, D & E. What are these and where are they defined in the instant claims? Correction is required.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for formaldehyde, acetaldehyde, propionaldehyde or acetone or propionone, does not reasonably provide enablement for any carbonyl compound such as quinolone. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make picolines the invention commensurate in scope with these claims.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwamoto (US 6281362) and Goe (US 5218122).

Iwamoto and Goe each teach that when a catalyst comprising Ti and/co Co along with Silica as zeolite constituent, commonly known as titanium silicate and/or cobalt silicate having a MFI zeolite framework is contacted with an alkyl aldehyde or alkyl ketone and ammonia in gas phase in the temperature range of 300-700 C, the

overall yields are improved. See Iwamoto col 2 lines 15-39, Col 3 lines 13-31, col 4 lines 19-32 and 40+ and col 5 lines 5-37. See Goe claims 1, 6 and 13.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamoto (US 6281362).

Iwamoto teaches the use of a titanium-silicate catalyst in reacting an aldehyde and ammonia in the gas phase in the temperature range of 300-700°C with improved yields.

Iwamoto differs that it does not specifically exemplify the X-ray diffraction pattern recited in claim 3.

However, this parameter would have been inherently disclosed as it would be a function of the $\text{SiO}_2:\text{xMO}_2$ ratio of the zeolite catalyst, which ratio falls within the scope of Iwamoto (see col 3 lines 13-31 and col 4 lines 19-32). Similar catalysts would be expected to have similar properties.

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It would have been obvious to one of ordinary skill in the art to modify the catalyst disclosed by Iwamoto to arrive at the instantly claimed invention. Rationale: Only routine skill is involved in adjusting the amount of a component of the claimed process to suit a particular starting material of an otherwise old process as the results vary merely in degree from that obtained in the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /D. Margaret Seaman/ whose telephone number is 571-272-0694. The examiner can normally be reached on 730am-4pm, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Margaret Seaman/
Primary Examiner
Art Unit 1625

dms